

**CLAIMS**

1. A method for verifying the identity of a message-originator program (D) by a message-receiver program (S), the method comprising the steps of:
  - receiving from said message-originator program (D) a message comprising a program-specific identifier ( $H(D)$ ), which has been provided for said message-originator program (D) by means of a trusted computing base (TCB); and
  - verifying whether said received program-specific identifier ( $H(D)$ ) is known to said message-receiver program (S).
2. A method for disclosing the identity of a message-originator program (D) to a message-receiver program (S), the method comprising:
  - sending from said message-originator program (D) to said message-receiver program (S) a message comprising a program-specific identifier ( $H(D)$ ), which has been provided for said message-originator program (D) by means of a trusted computing base (TCB), said program-specific identifier ( $H(D)$ ) being verifiable at said message-receiver program (S) whether it is known to said message-receiver program (S).
3. A method for verifying the identity of a message-originator program (D) by a message-receiver program (S), the method comprising the steps of:
  - providing a program-specific identifier ( $H(D)$ ) for said message-originator program (D) by means of a trusted computing base (TCB);
  - sending from said message-originator program (D) to said message-receiver program (S) a message comprising said program-specific identifier ( $H(D)$ );
  - receiving at said message-receiver program (S) said message; and

- verifying whether said received program-specific identifier ( $H(D)$ ) is known to said message-receiver program (S).
4. Method according to claim 1, wherein the message-receiver program (S) afterwards becomes a response-message-originator program and sends a response-message to the message-originator program (D) comprising:
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- a response-program-specific identifier ( $H(S)$ ), which has been provided for said response-message-originator program by means of the trusted computing base (TCB); and
  - an acknowledgment if the program-specific identifier ( $H(D)$ ) has been verified as
- 10 being known.
5. Method according to claim 1, wherein a substantially unique cryptographic identifier that is derived by applying a cryptographic function ( $H$ ) to the message-originator program (D), preferably a hash function, and more preferably a one-way-hash function, such as MD5 or SHA-1, is used as the program-specific identifier ( $H(D)$ ).
- 15 6. Method according to claim 1, further comprising the step of signing the program-specific identifier ( $H(D)$ ) and/or the message by use of a private cryptographic key ( $k^{-1}$ ) to establish trust between different programs.
7. Method according to claim 6, wherein the message further comprises an additional program-specific identifier ( $H(G)$ ) that is signed by use of the private cryptographic
- 20 key ( $k^{-1}$ ) to establish a membership of an additional program in a trust relationship.
8. Method according to claim 1, wherein the message-receiver program (S) has a public cryptographic key ( $k$ ).

9. Method according to claim 1, wherein the message-receiver program (S) and/or the trusted computing base (TCB) use(s) a list comprising pre-stored program-specific identifiers and wherein said message-receiver program (S) verifies whether the program-specific identifier ( $H(D)$ ) is identical to one of said pre-stored program-specific identifiers.

10. Method according to claim 1, wherein the message-receiver program (S) sends a rejection-message if the program-specific identifier ( $H(D)$ ) is not verified as being known.

11. Method according to claim 1, wherein the message-originator program (D) and the message-receiver program (S) are executed on different systems and are connectable via a network, each having its trusted computing base (TCB) for providing program-specific cryptographic identifiers.

12. A computer program comprising program code means for performing the steps of claim 1, when said program is run on a computer.

13. A computer program product comprising program code means stored on a computer readable medium for performing the method of claim 1, when said program product is run on a computer.

14. An apparatus for verifying the identity of a message-originator program (D) by a message-receiver program (S) on a computer, the apparatus comprising:

- computing means;
- a receiver-module for receiving from said message-originator program (D) a message comprising a program-specific identifier ( $H(D)$ ), which has been provided

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for said message-originator program (D) by means of a trusted computing base (TCB); and

- a verifier-module that verifies whether said program-specific identifier ( $H(D)$ ) is known to said message-receiver program (S).

5 15. An apparatus for disclosing the identity of a message-originator program (D) by a message-receiver program (S) on a computer, the apparatus comprising:

- computing means;
- a trusted computing base (TCB) comprising a generator-module for creating a program-specific identifier ( $H(D)$ ); and
- 10 - a sender-module for sending from said message-originator program (D) a message comprising said program-specific identifier ( $H(D)$ ), said program-specific identifier ( $H(D)$ ) being verifiable at said message-receiver program (S) whether it is known to said message-receiver program (S).

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